

me to the same effect, he having seen this fossil. The animal, of which the head is wanting, is abundantly endowed with feathers. It possesses a long tail, like *Rhamphorhynchus*, and a small pelvis; like birds, it has a single bone forming the tarsus; it is furnished with three toes; on the anterior limbs there is a fan of feathers, and also on the tail, on which the feathers radiate, not from the last vertebra, but laterally along the vertebræ. The simple tarsus of itself shows that this animal does not belong to the Pterodactyles, and the formation of the tail contradicts the idea that we connect with our birds, yet the feathers are not distinguishable from those of birds. The fossil feather from Solenhofen described by me will be derived from a similar animal, for which I have selected the name of *Archæopteryx lithographica**

XLI.—*Descriptions of newly discovered Spiders from the Island of Madeira.* By JOHN BLACKWALL, F.L.S.

A COLLECTION of Spiders recently made in the Island of Madeira, and presented to me by the Rev. Hamlet Clark, comprised the following species, which appear to be new or imperfectly known to arachnologists.

Tribe Octonoculina.

Family THOMISIDÆ.

Genus THOMISUS, Walek.

Thomisus spinifer.

Length of the male $\frac{1}{8}$ th of an inch; length of the cephalothorax $\frac{1}{16}$; breadth $\frac{1}{16}$; breadth of the abdomen $\frac{1}{20}$; length of an anterior leg $\frac{1}{4}$; length of a leg of the third pair $\frac{3}{20}$.

The cephalothorax is broad, convex, glossy, slightly compressed before, rounded in front and on the sides, abruptly depressed at the base, provided with a few strong black bristles, those on the frontal margin being directed forwards, and is of a reddish-yellow colour, an obscure band in the middle, which tapers from the eyes to its posterior extremity, being the palest. The eyes, which are seated on whitish spots, are disposed on the anterior part of the cephalothorax in two transverse curved rows, forming a crescent whose convexity is directed forwards; the eyes of each lateral pair are placed on tubercles, those of the anterior row being the largest of the eight. The falces are short, cuneiform, and vertical; the maxillæ are obliquely truncated at the extremity on the outer side, and inclined towards the lip, which is triangular; the sternum is heart-shaped; the legs are very un-

* Jahrb. für Mineral. 1861, p. 679.

equal in length, and are provided with hairs and spines; the first and second pairs are much the longest, the first pair rather surpassing the second, and the third pair is the shortest; each tarsus is terminated by two curved pectinated claws. The colour of these parts is pale dull yellow, the lip being the darkest, and the joints of the first and second pairs of legs having a brownish-red hue at the extremity. The palpi are short, and of a pale dull-yellow colour; the radial is rather shorter than the cubital joint, and projects a pointed apophysis from its extremity on the outer side; the digital joint, which is slightly tinged with brown, is convex and hairy externally, concave within, comprising the palpal organs, which are neither highly developed nor complicated in structure; they have a short, curved, black spine at their extremity, on the outer side, and are of a pale brownish-red colour. The abdomen is oviform, somewhat depressed, projects over the base of the cephalothorax, and is supplied on the upper part with fine black spines, more or less erect; a yellowish-brown band, that is palest in the medial line, extends along the upper part from its anterior extremity to the spinners, and is bounded on each side by a yellowish-white band; and a black band passes along each side, whose superior margin is bordered with red; the under part has a whitish-yellow hue, that of the branchial opercula is pale dull yellow, and the colour of the spinners is reddish brown.

Family CINIFLONIDÆ.

Genus CINIFLO, Blackw.

Ciniflo affinis.

Length of the female $\frac{1}{10}$ th of an inch; length of the cephalothorax $\frac{1}{20}$; breadth $\frac{1}{4}$; breadth of the abdomen $\frac{1}{20}$; length of an anterior leg $\frac{1}{8}$; length of a leg of the third pair $\frac{1}{10}$.

The eyes are unequal in size, and are disposed on the anterior part of the cephalothorax in two transverse rows; the four intermediate ones form a trapezoid whose anterior side is the shortest, and those of each lateral pair are seated obliquely on a tubercle, and are near to each other, but not in contact; the lateral eyes of the anterior row, which is situated immediately above the frontal margin, are rather the largest, and the intermediate ones of the same row are the darkest and much the smallest of the eight. The cephalothorax is compressed before, rounded in front and on the sides, which are marked with furrows converging towards the middle; it is convex in the cephalic region, depressed at the base, glossy, and of a yellowish-brown colour, the anterior part and narrow lateral margins being the darkest. The falces are powerful, conical, and vertical; the maxillæ are somewhat

enlarged at the extremity, and slightly inclined towards the lip, which has a short-oval form; the sternum is heart-shaped; the legs are moderately long, provided with hairs and fine spines, and each posterior one has a calamistrum on the superior surface of its metatarsus; the first pair is the longest, the second and fourth pairs are about equal in length, and the third pair is the shortest. These parts, with the palpi, are of a brownish-yellow colour, the annuli with which the legs are marked and the base of the lip having a brown-black hue. The abdomen is oviform, sparingly clothed with hairs, convex above, and projects over the base of the cephalothorax; the upper part is of a dull yellowish-brown hue, spotted with white; at the anterior part there is a brownish-black oblong mark, tinged with dull yellow in the medial line, which is followed by four black spots, disposed in pairs, and inclined towards each other; to these succeed several angular lines of the same hue, whose vertices are directed forwards; the sides have a dull-brown hue, the superior margin being the darkest, and the colour of the under part is pale yellowish brown; the sexual organs are moderately developed, and of a red-brown colour; the spinners are eight in number, and those of the inferior pair, which are the shortest, consist of a single joint each, and are united throughout their entire length.

This minute species is very closely allied to *Ciniflo humilis*.

Genus VELEDA, Blackw.

Veleda pallens.

Length of the male $\frac{1}{8}$ th of an inch; length of the cephalothorax $\frac{1}{20}$; breadth $\frac{1}{24}$; breadth of the abdomen $\frac{1}{20}$; length of an anterior leg $\frac{1}{6}$; length of a leg of the third pair $\frac{1}{12}$.

The legs are very unequal in length; the first pair is much the longest, then the fourth, and the third pair is the shortest; each metatarsus of the posterior pair is provided with a calamistrum situated on its superior surface, and on the inferior surface of its extremity and that of the tarsus there are some short spines; the colour of these limbs, which are hairy, is brownish yellow, a dark-brown line extending along the upper part of the femora, genua, and tibiæ of the second, third, and fourth pairs; the femora, genua, tibiæ, and base of the metatarsus of the first pair have a dark-brown hue, that of their sides being yellow-brown. The palpi resemble the third pair of legs in colour, but the specimen from which the description was made had to undergo its final ecdysis; for though the digital joints were very tumid, yet the palpal organs were not developed. The cephalothorax is long, somewhat compressed before, depressed and rounded on the sides, clothed with white hairs, and has an

indentation in the medial line; it is of a brownish-black colour, with three longitudinal yellowish-white bands, one in the middle, another on each side, and with lateral margins of the same hue. The eyes are small, nearly equal in size, and disposed on the anterior part of the cephalothorax in two transverse curved rows, whose convexity is directed forwards; the anterior row, which is the less curved, is situated near the frontal margin, and the intermediate eyes, which are seated on a tubercle, are the largest, and the lateral ones rather the smallest of the eight; the lateral eyes of both rows are widely apart, and are placed on minute tubercles, and the intermediate ones form a trapezoid whose anterior side is the shortest. The falces are short, conical, vertical, and of a yellowish-brown colour. The maxillæ are straight, powerful, and greatly enlarged and rounded at the extremity, which is rather prominent on the inner surface; and the lip is short and triangular. These organs are of a reddish-brown colour. The sternum is of an oblong-oval form; it is thinly clothed with white hairs, and has a brownish-black hue. The abdomen is of an oblong-oviform figure, somewhat convex above, and projects over the base of the cephalothorax; the upper part is of a yellowish-white colour, finely reticulated with brown; a narrow dark-brown band extends along the middle, which is broadest towards its anterior extremity, and is crossed by several very short lines of the same hue near the spinners, and from these organs two short, dark-brown, lateral streaks are directed forwards; the sides are minutely spotted with brown, and a broad brownish-black band, bordered by dull white, extends along the middle of the under part; the spinners are eight in number, those of the inferior pair, which are the shortest, consist of a single joint each, and are united throughout their entire length.

That the *Veledæ* evidently possess many well-marked characters in common with the spiders of the genus *Uloborus* is asserted in the 'History of the Spiders of Great Britain and Ireland,' part 1. p. 151; but as MM. Dufour, Hahn, and Koch affirm that the snare of *Uloborus Walckenaerius* is constructed on the same plan as those of the *Epeiridæ*, it may be inferred that it has not the additional pair of spinners and calamistra, as the snares of all spiders provided with this apparatus, whose economy is known, exhibit unmistakeable evidence of its having been employed in their fabrication.

Genus MITHRAS, Koch.

Mithras flavidus.

Length of the male $\frac{1}{10}$ th of an inch; length of the cephalo-
Ann. & Mag. N. Hist. Ser. 3. Vol. ix. 27

thorax $\frac{1}{18}$; breadth $\frac{1}{18}$; breadth of the abdomen $\frac{1}{18}$; length of an anterior leg $\frac{1}{5}$; length of a leg of the third pair $\frac{1}{12}$.

The cephalothorax has a short, broad, somewhat oval form; it is convex, prominent and rather pointed in front, depressed at the base, and has two furrows on each side directed obliquely upwards; it is clothed with short yellowish-white hairs, and its colour is yellowish brown, the medial line and anterior margin being the palest. The eyes, which are very unequal in size, and seated on brown spots, are disposed on the sides and anterior part of the cephalothorax in two transverse curved rows; those of the posterior row, which is much the longer, and has its convexity directed forwards, are much larger than those of the anterior row, the lateral eyes, seated on bold conical tubercles, being rather the largest; the eyes of the anterior row, whose convexity is directed upwards, are situated high above the frontal margin, the two intermediate ones are placed very near to each other on a minute tubercle, and the lateral ones are not very conspicuous, being the smallest and lightest-coloured of the eight; the lateral eyes of both rows are separated by a very wide interval. The falces are short, subconical, and vertical; the maxillæ are powerful, and greatly enlarged at the extremity, which is protuberant on the inner surface; the lip is triangular, and the sternum is oblong heart-shaped, with small eminences on the sides opposite to the legs. These parts are of a dull brownish-yellow colour, the sternum, which is the darkest, having its extremity and lateral margins of a dark-brown hue. The legs are very unequal in length, the first pair being much the longest and most robust; the second pair is longer than the fourth, and the third pair is the shortest; they are provided with hairs and sessile spines, the latter being the longest and most numerous near the base of the tibia of the anterior pair on the inner side, and a calamistrum occurs on the upper surface of the metatarsus of each posterior leg; these limbs have a dull brownish-yellow hue, and, with the exception of the tarsi, are more or less marked with dark brown on the inner surface. The palpi resemble the legs in colour, but are not marked with dark brown; the humeral joint is slightly curved upwards; and the radial, which is longer than the cubital joint, is oval, and supplied with some long bristles at its pointed extremity; the digital joint is large, of an oblong-oval form, convex and clothed with coarse hairs externally, and concave within; connected with this concavity are the very highly developed and complex palpal organs, whose broad prominent base, though curved abruptly downwards, extends to the articulation of the humeral with the cubital joint; a remarkably long, black, filiform spine passes under their margin along the inner side, and curves round the

extremity, outer side, and base; they are terminated by several curved pointed processes, and have a yellowish-red hue, that of the margins being brown. The abdomen is oviform, convex above, with a conical protuberance on the upper part of each side, which is nearly equidistant from both extremities; it is densely clothed with coarse hairs, and projects over the base of the cephalothorax; its colour is dull yellow, with a brown band extending along the middle of the upper part, which tapers to the spinners, and is somewhat ramified; the lateral protuberances have a faint tinge of orange, and the sides are marked with oblique, slightly curved, dark-brown lines; the under part has a dark-brown hue mingled with dull yellow, and is broadly bordered laterally with yellowish white: the spinners are eight in number; those constituting the inferior pair, which are the shortest, consist of a single joint each, and are united throughout their entire length.

Arachnologists have experienced much difficulty in assigning to *Mithras paradoxus*, the type of the genus, a satisfactory position in the systematic arrangement of the *Araneidea*; nor is this at all surprising, as its appearance is very anomalous, and long after its discovery it was generally supposed to have only six eyes. It is now known to possess eight organs of vision; and if, as is in the highest degree probable, it and the *Mithras undulatus* of M. Koch should be found to have four pairs of spinners and calamistra, every difficulty with regard to their classification will be removed; for in that case they, together with *Mithras flavidus* and *Mithras dubius*, must undoubtedly be placed in the family *Ciniflonidæ*, immediately after the genus *Veleda*.

Mithras dubius.

Length of the female $\frac{1}{10}$ th of an inch; length of the cephalothorax $\frac{1}{20}$; breadth $\frac{1}{24}$; breadth of the abdomen $\frac{1}{16}$; length of an anterior leg $\frac{1}{7}$; length of a leg of the third pair $\frac{1}{16}$.

The cephalothorax is short, broad, somewhat oval, convex, but depressed at the base, prominent and rounded in front, and has two furrows on each side directed obliquely upwards; it is thinly clothed with short yellowish hairs, and of a dark-brown colour, being palest in the medial line and immediately above the lateral margins. In the disposition and relative size of its eyes it resembles *Mithras flavidus*. The falces are short, subconical, and vertical; the maxillæ are powerful and greatly enlarged at the extremity, which is protuberant on the inner surface; the lip is triangular, and the sternum is oblong heart-shaped, with small eminences on the sides opposite to the legs. These parts are of a dull brownish-yellow colour, the sternum, which is the darkest, having its extremity and lateral margins of a dark-brown hue.

The legs are robust, provided with hairs and a few fine spines, and there is a calamistrum on the upper surface of the metatarsus of each posterior leg, they are very unequal in length, the first pair being much the longest, the second pair surpasses the fourth, and the third pair is the shortest; they have a dull brownish-yellow hue, and, with the exception of the tarsi, are marked with very dark brown on the inner surface. The palpi are short, and resemble the legs in colour. The abdomen is somewhat oviform, convex above, projecting over the base of the cephalothorax, and has a prominent conical protuberance on the upper part of each side, which is nearly equidistant from both extremities; the upper part is of a brown colour, bordered by a pale-yellow band, whose continuity is interrupted in front; the medial region has a dull brownish-yellow hue, and comprises in its anterior part a brown streak, which extends about one-third of its length; the brown upper part is intersected by brownish-black transverse lines; those on the anterior half have their extremities enlarged, more especially that which connects the two conical protuberances, and those on the posterior half form very obtuse angles whose vertices are directed forwards; the sides are marked with oblique, confluent, dark-brown lines, and the under part has a dark-brown hue slightly mixed with dull brownish yellow, and is broadly bordered laterally with yellowish white; the eight spinners have a brownish-yellow hue; those of the inferior pair, which are the shortest, consist of a single joint each, and are united throughout their entire length.

The specific name *dubius* is conferred provisionally upon this spider, as it possibly may be the female of *Mithras flavidus*, though it differs from it greatly in colour.

Family THERIDIIDÆ.

Genus THERIDION, Walck.

Theridion elegans.

Length of the female $\frac{3}{20}$ ths of an inch; length of the cephalothorax $\frac{1}{10}$; breadth $\frac{1}{20}$; breadth of the abdomen $\frac{1}{12}$; length of an anterior leg $\frac{1}{4}$; length of a leg of the third pair $\frac{1}{6}$.

The legs are moderately long, provided with hairs, and of a reddish-yellow hue, with dark-brown annuli at the extremity of the joints, those of the femora being the broadest; the first pair is the longest, the second and fourth pairs are about equal in length, and the third pair is the shortest; each tarsus is terminated by three claws; the two superior ones are curved, and the inferior one is inflected near its base. The palpi resemble the legs in colour, but are rather paler, and have a curved claw at their extremity. The cephalothorax is convex, glossy, somewhat

compressed before, rounded on the sides, which are marked with slight furrows converging towards an indentation in the medial line, and is of a dark-reddish-brown colour, the medial line and lateral margins being much the darkest. The eyes are nearly equal in size, and are disposed on the anterior part of the cephalothorax in two transverse rows; the four intermediate ones form a square, the anterior ones, which are seated on a slight prominence, being the darkest of the eight; and those of each lateral pair are placed obliquely on a tubercle, and are contiguous. The falces are conical, vertical, and armed with a few small teeth near their extremity on the inner surface; the maxillæ are obliquely truncated at the extremity, on the outer side, and are inclined towards the lip, which is triangular. These organs are of a red-brown colour, the base of the lip, a longitudinal streak on the outer side of the falces, and a spot near their base, in front, having a dark-brown hue. The sternum is heart-shaped, with eminences on the sides opposite to the legs, and is of a dark-brown colour, tinged red in the medial line. The abdomen is somewhat oviform, sparingly supplied with hairs, very convex above, and projects over the base of the cephalothorax; the upper part is of a yellowish-white colour, obscurely reticulated with fine pale-brown lines, and a dark-brown, dentated, medial band tapers to the spinners, whose continuity is interrupted near its anterior extremity, which is the darkest; the sides have a brown hue, being darkest at their superior margin, and are marked with oblique lines formed by confluent dull yellowish-white spots; a dark-brown band, which is broadest at its posterior extremity, extends along the middle of the under part, and two short streaks of the same hue pass outwards from each side of the spinners; the medial band is bordered laterally with yellowish white, and the colour of the sexual organs is reddish brown.

The sexes resemble each other in the design formed by the distribution of their colours; but the male is smaller than the female, and the relative length of its legs is different, the second pair being very decidedly longer than the fourth. Its palpi are short, and of a pale-yellowish colour, the digital joint having a tinge of brown; several long bristles project from the cubital joint in front, and the radial joint has two apophyses at its extremity, one on the inner and the other on the outer side, the superior margin of the latter, which is the larger, being fringed with long hairs extending over the palpal organs; the digital joint has a short, broad, somewhat oval form, its superior margin being much the most curved; it is convex and hairy externally, concave within, comprising the palpal organs, which are highly developed, encircled by two contiguous, filiform, black spines,

and are of a pale-brownish-yellow colour. The convex sides of the digital joints are directed towards each other.

Family LINYPHIIDÆ.

Genus NERIENE, Blackw.

Neriëne pigra.

Length of the female $\frac{1}{9}$ th of an inch; length of the cephalothorax $\frac{1}{20}$; breadth $\frac{1}{24}$; breadth of the abdomen $\frac{1}{16}$; length of an anterior leg $\frac{1}{6}$; length of a leg of the third pair $\frac{1}{9}$.

The eyes are disposed in two transverse rows on the anterior part of the cephalothorax; the four intermediate ones form a trapezoid, the two anterior ones, which constitute its shortest side, being the smallest of the eight; the eyes of each lateral pair are seated obliquely on a tubercle, and are near to each other, but not in contact. The cephalothorax is convex in the cephalic region, glossy, somewhat compressed before, rounded in front and on the sides, which are marked with slight furrows converging towards an indentation in the medial line; the lip is semicircular and prominent at the apex; and the sternum is heart-shaped. These parts are of a brown colour, the sternum and base of the lip being much the darkest. The falces are powerful, conical, rather divergent at the extremity, inclined towards the sternum, armed with teeth on the inner surface, and have a longitudinal row of short strong spines in front, towards the outer side; the maxillæ are somewhat enlarged at the extremity, and inclined towards the lip; the legs are moderately long, and provided with hairs; the first pair is the longest, then the fourth, and the third pair is the shortest; each tarsus is terminated by three slender claws; the two superior ones are curved, and the inferior one is inflected at its base; the palpi are slender and without a claw at their extremity. These organs have a yellow-brown hue, the legs and palpi being much the palest. The abdomen is subglobular, thinly clothed with short hairs, glossy, and projects over the base of the cephalothorax; it is of a brownish-black colour, and that of the sexual organs, which have, in connexion with their anterior margin, an oval process directed backwards, is dark brown faintly tinged with red.

Family EPEÏRIDÆ.

Genus EPEÏRA, Walck.

Epeïra lentiginosa.

Length of the female $\frac{5}{24}$ ths of an inch; length of the cephalothorax $\frac{1}{8}$; breadth $\frac{1}{12}$; breadth of the abdomen $\frac{1}{8}$; length of an anterior leg $\frac{7}{16}$; length of a leg of the third pair $\frac{1}{4}$.

The abdomen is short, broad, somewhat triangular, having its vertex at the spinners, convex above, thinly clothed with pale hairs, and projects greatly over the base of the cephalothorax; the upper part is of a dark soot-colour, thickly freckled with yellowish white, particularly at the anterior extremity; the sides and under part have a yellow-brown hue; the former are marked with oblique, dark, soot-coloured lines, and the latter has a broad longitudinal band of the same hue in the middle, on each side of which there is a curved yellow line, whose posterior extremity is the broadest; and the colour of the spinners is dark-brown. The sexual organs of the specimen from which the description was made were not fully developed; consequently it had not arrived at maturity. The cephalothorax is convex, glossy, compressed before, rounded on the sides, which are marked with slight furrows converging towards an indentation in the medial line; it has a dull-yellow hue, and from the anterior margin, which is soot-coloured, a short broad streak of the same hue passes upwards between each lateral pair of eyes and the intermediate ones. The eyes are seated on black spots on the anterior part of the cephalothorax; the four intermediate ones, which are placed on a prominence, form a square nearly, those of the anterior pair being rather wider apart than those of the posterior pair, and the eyes of each lateral pair are seated obliquely on a tubercle, and are the smallest of the eight. The falcæ are conical, vertical, and armed with teeth on the inner surface; the maxillæ are short, straight, powerful, and enlarged and rounded at the extremity; the lip is semicircular, but somewhat pointed at the apex, and the legs are long, robust, and provided with hairs and spines; the first pair is the longest, then the second, and the third pair is the shortest; each tarsus is terminated by claws of the usual number and structure. These parts have a dull-yellow hue, but the base of the lip is soot-coloured, and annuli of the same hue occur on the legs, those at the extremity of the femora of the posterior pair being the broadest. The palpi resemble the legs in colour, and have a curved minutely pectinated claw at their extremity. The sternum is heart-shaped, with eminences on the sides opposite to the legs; it is of a dark brown colour, strongly tinged with yellow in the medial line.

GENUS TETRAGNATHA, Latr.

Tetragnatha lineata.

Length of the male $\frac{1}{7}$ th of an inch; length of the cephalothorax $\frac{1}{15}$; breadth $\frac{1}{24}$; breadth of the abdomen $\frac{1}{15}$; length of an anterior leg $\frac{7}{15}$; length of a leg of the third pair $\frac{1}{4}$.

The eyes, which are unequal in size, and seated on black

spots, are disposed on the anterior part of the cephalothorax in two transverse rows; the four intermediate ones form a trapezoid whose anterior side is the shortest, those of the anterior pair are placed on a small tubercle, and those of the posterior pair, which are much the largest of the eight, are placed on separate tubercles; the eyes of each lateral pair are the smallest, and are seated near to each other, but not in contact, on a minute tubercle. The cephalothorax is moderately convex, glossy, compressed before, rounded in front and on the sides, which are marked with slight furrows converging towards an indentation in the medial line; it is of a dull-yellow colour, with a brownish-black longitudinal band in the middle, and a less distinctly defined one of the same hue above each lateral margin. The falcæ are long, conical, rather divergent at the extremity, armed with teeth on the inner surface, and inclined towards the sternum; and the maxillæ are straight and enlarged and somewhat rounded at the extremity. These organs have a dull-yellow colour, faintly tinged with brown. The lip is nearly semicircular, but pointed and prominent at the apex; and the sternum is heart-shaped. These parts have a reddish-brown hue, the lip being much the darkest. The legs are long, very slender, provided with hairs and a few spines, and are of a dull-yellow hue, with brown-black annuli at the extremity of the joints; the first pair is the longest, then the second, and the third pair is the shortest; the tarsi are terminated by claws of the usual number and structure. The palpi are short, paler than the legs, and without brown-black annuli; the radial is larger than the eubital joint, and has a long bristle at its extremity, in front; the digital joint is oval, convex and hairy externally, concave within, comprising the palpal organs, which are moderately developed, rather complex in structure, with a long, prominent, dark-brown, filiform spine, that originates near their extremity on the inner side, and curves obliquely upwards to the outer side; these organs have a brownish-red hue. The convex sides of the digital joints are directed towards each other. The abdomen is long, subcylindrical, or somewhat depressed, and projects a little over the base of the cephalothorax; it is glossy, of a pale dull-yellowish colour, and has a black band extending along the middle of the upper part about two-thirds of its length; this band, which has numerous white spots on each side of it, is bifid at its posterior extremity, and is succeeded by several angular lines of the same hue, whose vertices are directed forwards; and a black line, slightly varying in breadth, passes along the upper part of each side, the two meeting above the spinners; a broad, dark-brown, longitudinal band occurs in the middle of the under part, and the colour of the branchial opercula is pale yellow.

Tribe Senoculina.

Family DYSDERIDÆ.

Genus DYSDERA, Latr.

Dysdera diversa.

Length of the male $\frac{5}{10}$ ths of an inch; length of the cephalothorax $\frac{1}{7}$; breadth $\frac{1}{9}$; breadth of the abdomen $\frac{1}{9}$; length of an anterior leg $\frac{3}{8}$; length of a leg of the third pair $\frac{3}{10}$.

The cephalothorax is convex, slightly compressed before, rounded on the sides and in front, without an indentation in the medial line, and is of a very dark-brown colour, faintly tinged with red. The eyes, which are nearly equal in size and diaphanous, are closely grouped in the form of a small oval open in front, on a prominence of the cephalothorax, situated immediately above the frontal margin, the two anterior ones being rather the largest of the six. The falces are subconical, prominent, armed with a few small teeth, and fringed with long hairs on the inner surface; the maxillæ are straight, enlarged and convex at the base, and somewhat pointed at the extremity, which is rather protuberant on the inner side; the lip has an oblong-oval form, decreasing in breadth to the apex, which is notched, and has a transverse furrow at its base; and the sternum is oval. These parts are of a red-brown colour, the sternum being the darkest, and the maxillæ and apex of the lip the palest. The legs are moderately long, provided with short hairs, and have a red hue; the third and fourth pairs are rather the palest, and have a few sessile spines on the tibia, metatarsus, and tarsus; the first pair is the longest, then the second, and the third pair is the shortest; each tarsus is terminated by two curved, minutely pectinated claws, and below them there is a small scopula. The palpi resemble the legs in colour; the digital joint is small, oval, convex and hairy externally, slightly concave underneath, and with this concavity the palpal organs are connected by a short pedicle; they are prominent, directed upwards, not very complex in structure, oviform at the base, from which a long, curved, somewhat depressed process extends, whose extremity appears to be bifid, but its dark-brown divergent branches are connected by pale delicate membrane; these organs, which have a small, slightly curved, dark-brown process near their middle, on the under side, are of a pale-yellowish-red hue, with two transverse brownish-red bands at their oviform base, formed apparently by the convolutions of an internal vessel. The abdomen is oviform, thinly clothed with short hairs, convex above, and projects a little over the base of the cephalothorax; it is of a very pale-yellow colour, reticulated with brown on the upper part, a short longitudinal line of the latter hue occurring

in the middle, and near the anterior extremity there is a minute circular depression on each side of the medial line; the under part is rather the palest, and has a branchial and tracheal stigma on each side of its anterior extremity.

Family ŒCOBIIDÆ.

Genus ŒCOBIUS, Lucas.

Œcobius navus.

Œcobius navus, Blackw. Ann. & Mag. Nat. Hist. ser. 3. vol. iv. p. 266.º

Several specimens of *Œcobius navus* were comprised in the collection of Madeiran Spiders presented to me by the Rev. Hamlet Clark, and among them an adult female, a careful examination of which has led to the establishment of important characters either previously unrecorded or regarded as doubtful.

The dimensions of this species, as given in the 'Annals and Mag. of Nat. Hist.,' do not require any correction. Its legs are equal in length, and the posterior pair have a calamistrum on the superior surface of each metatarsus. The spinners are eight in number; those constituting the inferior pair, which are the shortest, consist of a single joint each, and are united throughout their entire length. The sexual organs are moderately developed, of a red-brown hue, and have, in connexion with their anterior margin, a brownish-yellow process which is directed backwards.

This is the only Spider provided with eight spinners and calamistra, belonging to the tribe *Senoculina*, that has come under my observation; and as its superior spinners are long and triarticulate, with the spinning-tubes disposed on the inferior surface of their terminal joint, it may reasonably be inferred that its economy must be influenced by its very remarkable external structure.

From the above considerations, it is evident that for the reception of this species, and also of the *Œcobius domesticus* and *Œcobius annulatus* of M. Lucas, should a close relation of affinity be hereafter established among them by similarity of organization, of which scarcely a doubt can be entertained, a new family must be founded, which may be thus characterized:—

Family ŒCOBIIDÆ.

Spinners eight; those of the inferior pair, which are the shortest, consist of a single joint each, and are united throughout their entire length.

Legs of variable relative length in different species, each metatarsus of the posterior pair being provided with a calamistrum on its superior surface.